### In the Specification

Please amend the Specification by replacing the title with the following:

# METHOD OF FABRICATING A SEMICONDUCTOR DEVICE INCLUDING A CRYSTALLINE ACTIVE SILICON LAYER

#### In the Abstract

Please amend the Abstract by replacing the title with the following:

# METHOD OF FABRICATING A SEMICONDUCTOR DEVICE INCLUDING A CRYSTALLINE ACTIVE SILICON LAYER

## In the Claims

For the convenience of the Examiner, all pending claims of the present Application are shown below whether or not an amendment has been made. Please refer to any attached sheets showing a marked up version of any amendments to the Specification and Claims.

1. (Amended) A method of fabricating a semiconductor device including a crystallized active layer comprising the steps of:

providing a substrate;

depositing an amorphous silicon layer on said substrate;

heating said substrate while depositing a metal layer to induce low temperature crystallization of amorphous silicon on at least a portion of said amorphous silicon layer, the metal layer comprising an element selected from the group consisting of nickel, palladium, tin, silver, gold, aluminum, copper, cobalt, chromium ruthenium, rhodium, cadmium, platinum, and antimony; and

conducting a thermal treatment of said substrate so that said amorphous silicon layer is crystallized by metal induced crystallization propagating from the portion covered by said metal layer.

Claim 2 is canceled without prejudice or disclaimer.



- 3. The method according to Claim 1, wherein the substrate is heated at a temperature in a range of 200-700°C.
- 4. The method according to Claim 1, wherein said metal layer is deposited using at least one of sputtering, heating evaporation, PECVD and CVD.
- 5. The method according to Claim 1, wherein the substrate is heated by using a heat conduction or a heat radiation method.
- 6. The method according to Claim 1, wherein a portion of said metal layer contacting with said amorphous silicon layer forms a metal silicide.
- 7. The method according to Claim 6, wherein other portions of said metal layer remain in the state of metal and further comprising a step of removing the remaining metal layer by etching.
- 8. (Amended) The method according to Claim 1, wherein at least a portion of said amorphous silicon layer is crystallized by metal induced lateral crystallization during the process of heating the substrate while depositing the metal layer.

Claim 9 is canceled without prejudice or disclaimer.

10. The method according to Claim 1, wherein the step of heating the substrate while depositing the metal layer comprises the steps of:

forming an insulation layer on said substrate and said amorphous silicon layer; removing a portion of said insulation layer to expose a portion of said amorphous silicon layer; and

depositing said metal layer on the exposed surface of said amorphous silicon layer while heating said substrate.

Claims 11-15 are canceled without prejudice or disclaimer.

